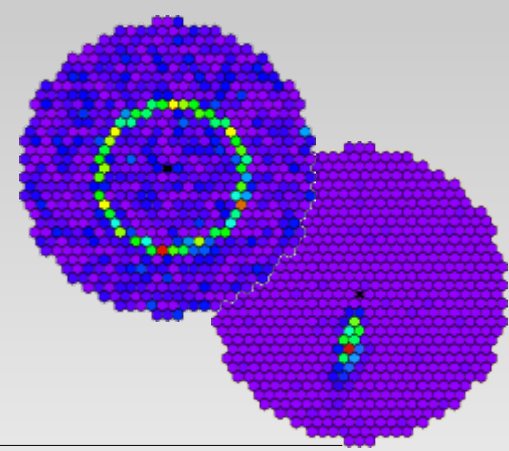




DWARF

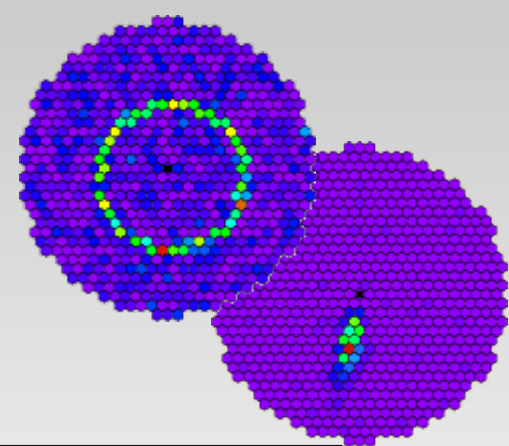


Dataflow, Automation, Monte Carlo

- What do we have?
- What can we use?
- What changes are necessary?
- How is the Monte Carlo automation planned?
- What do we still need for a dedicated monitoring analysis?



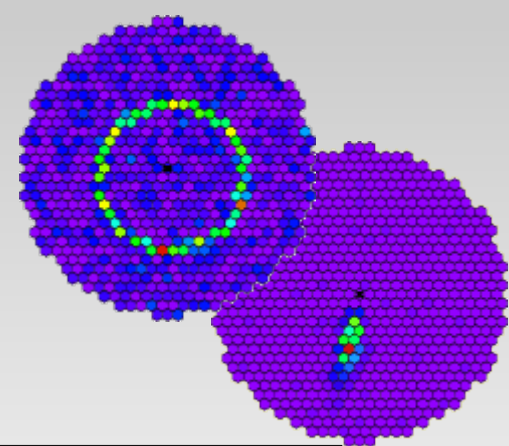
MC for Longterm Monitoring



- we need:
 - good knowledge of the data
(weather conditions, telescope performance, ...)
 - simulation well describing the data
 - fitting MC for **all** data
- already now:
 - setup for MC studies



Initial Situation



Aim: flexible, automatic production of MC

- production on demand
- production fitting exactly monitoring data

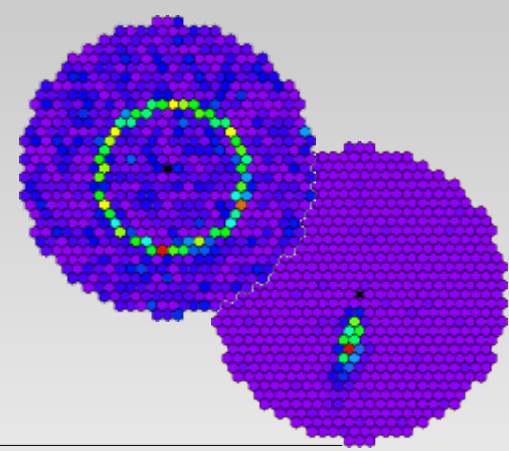
we have: automatic processing of all data
(running stable since ~ 4 years)

Can we use the concept and setup for the
automatic production of MC?

Yes, we can!



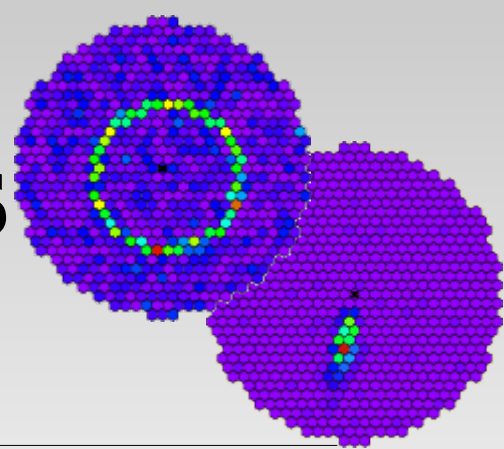
New



- several telescope setups
 - for design study
 - for production: Dwarf, Magic
- several dataflows
 - MC: Corsika usable for several setups?
 - Data
- several SW packages
 - Mars CheObs for Dwarf, Magic (MC & data)
 - others: Bcn-Simulation, simtelarray for CTA



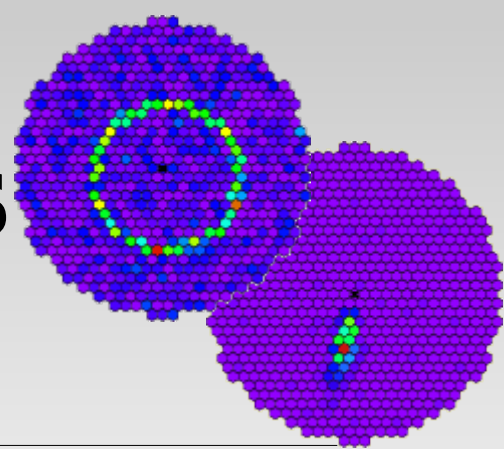
Needed Changes



- adaption of data structure (paths in the DC)
- adaption of the database
 - new tables for MC
 - corsika
 - ceres
 - status tables
 - change to more flexible structure for status tables
- new scripts
 - runcorsika
 - runceres



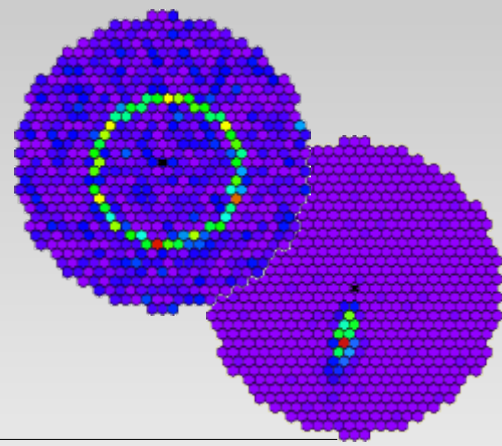
Needed Changes



- adaption of data structure (paths in the DC)
- adaption of the database
 - new tables for MC
 - corsika – **done** (to be enhanced)
 - ceres
 - status tables – **ongoing**
 - change to more flexible structure for status tables – **ongoing**
- new scripts
 - runcorsika – **done**
 - runceres



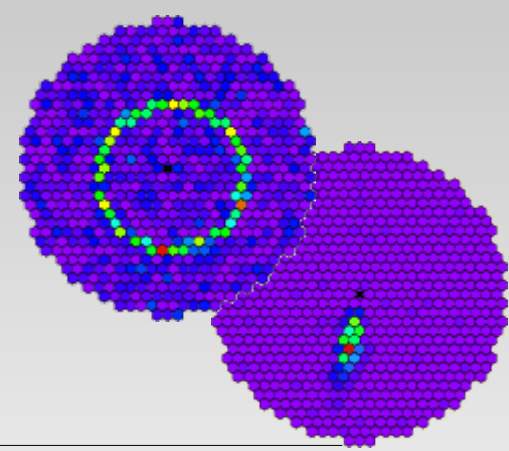
Next steps



- finish changes in DB
- start corsika production (runcorsika)
- write runceres
- webinterface => overview which MC are available
- produce MC
and do studies, i.e. your job :)



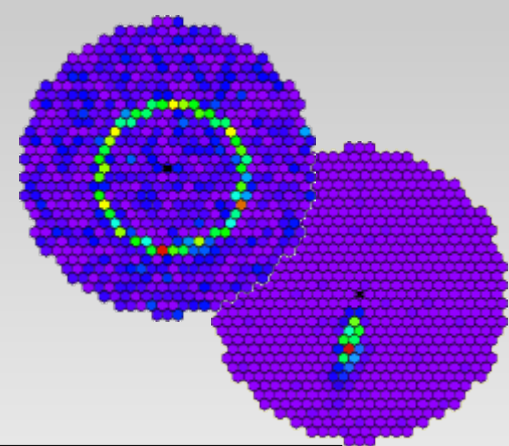
near future



- production on demand (insert in DB via macro)
- automatic re-processing of all MC when there's a new release
workflow:
 - you develop MC
e.g. new trigger setups, improvement in setups, ...
 - you commit changes => new release
 - release is installed in the DC, DB is resetted
=> all MC are reprocessed automatically



future



- flexible MC production, production cites:
 - Würzburg: Dwarf, Magic (?), CTA (?)
 - ISDC: CTA, Dwarf (?)
 - Dortmund: Magic, Dwarf (?), CTA (?)
- production on demand via webinterface
- automatic production of appropriate MC for **all** data:
studies needed for good understanding of the data
 - atmosphere (calima, extinction, lidar, weather, clouds)
 - NSB (moon, twilight)
 - better automatic datacheck